

Rejection of Claims 15-21 and 24 Under 35 USC §112, Second Paragraph

The Examiner finds the phrase "universal control" vague and indefinite "because the term is not defined in the application..." (Paper No. 20080726, p.2)

Applicant notes that the phrase "universal control" is referred to in the specification which states that "an inventive capture oligonucleotide also includes a universal nucleotide control sequence or spacer sequence therein" and that, in particular embodiments, "the universal nucleotide control sequence or spacer sequence is interspersed between the at least two specific capture sequences making up the complete capture oligonucleotide" (p.8, lines 15-18, referring to WO 2005/003318) The specification further states that "[t]he spotted oligonucleotides may include a unique sequence, which acts as an internal control element for the hybridization on the array to permit standardization and quantification." (p.4, lines 21-23, referring to WO 2005/003318) The specification details how "complementary oligonucleotide(s) are prepared to the control sequences, labeled under conditions similar to the small RNA fragments however the label is uniquely identifiable from the label attached to the small RNA fragments..." (p.4, line 23 – p.5, line 2 referring to WO 2005/003318) Taken together, Applicant submits that one of skill in the art would recognize that the phrase "universal control" refers to an oligonucleotide sequence included in capture oligonucleotide which acts as an internal control element for the hybridization on the array to permit standardization and quantification. Therefore, it is submitted that claims 15-21 and 24 are definite and it is respectfully requested that the rejection be withdrawn.

Rejection of Claims 15-19 Under 35 USC §102(b)

Claims 15-19 stand rejected under 35 USC §102(b) as being anticipated by Dale et al. (WO 00/070093).

The Examiner asserts that Dale et al. disclose microarrays that include all the limitations mentioned in the instant claims. Pages 13 – 21 of the Dale et al. reference are cited in support of this assertion.

Applicant submits that the Dale et al. reference does not appear to disclose all aspects of claims 15-19. In particular, Applicant finds no apparent disclosure relating to at least two capture oligonucleotides on a substrate wherein the capture oligonucleotides each include a control or

spacer nucleotide sequence and at least two replicates of a nucleotide sequence complementary to a first or second short RNA fragment.

In view of the lack of disclosure of all aspects of the present claims, Applicant submits that claims 15-19 are not anticipated by Dale et al. and respectfully request withdrawal of this rejection and allowance of the claims.

Rejection of Claims 20, 21 and 24 Under 35 USC §103(a)

Claims 20, 21 and 24 stand rejected under 35 USC §103(a) as being obvious over Dale et al. (WO 00/070093) in view of Houthoff et al. (U.S. Patent No. 6,133,038).

In view of Applicant's belief as to the allowability of independent claim 15, claims 20, 21 and 24, which include all aspects of claim 15, are likewise submitted to be allowable. Applicant submits that these claims encompass patentable subject matter separate from claim 15. Applicant reserves the right to make such remarks of record in the event that the rejection is maintained.

Summary

Claims 15-21 and 24 are currently pending in the instant application. In view of the above remarks, Applicant submits that the pending claims are in condition for allowance. Although the claims have not been amended herein, the same are attached hereto for the convenience of the Examiner.

Questions regarding this application may be directed to the undersigned attorney at the telephone number provided.

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Respectfully submitted,

By 

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